# **PUMA GT** series

**8, 10 Inch
Global Standard
Turning Center**

**PUMA GT series**
PUMA GT2100
PUMA GT2600

**ver.** EN 150923 SU

# PUMA GT series

**PUMA GT Series is an 8/10-inch grade turning center suggesting new global standards. The series is equipped with the most powerful spindle in its class and the tool post of the next-generation concept to guarantee powerful and precise cutting capability and exceptional productivity. The design of PUMA GT Series focuses on convenient operation and easy maintenance.**

## Contents

**Sample**
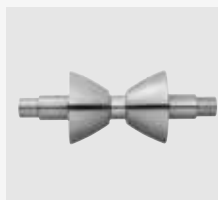
### Powerful/Precise Cutting Capability

PUMA GT Series realizes stable and powerful cutting capabilities by adopting the box guideway structure and the highest spindle power in its class.

### Excellent Productivity

Comparing to the previous models, faster repaid traverse and optimal control function ensure the highest productivity.

### Improved Usability

Usability of PUMA GT Series is maximized with user-friendly operation panel, and simple maintenance functions.

## Basic Structure

Box guideways are applied to all axes to prevent vibration, secure dynamic rigidity, and ensure powerful and precise machining.

### Diverse Line-up Fully Satisfying Demands of Customers

PUMA GT Series provides 10 line-ups, of which configuration varies depending on the standard chuck size, the length of machine, and operation of rotating tools.
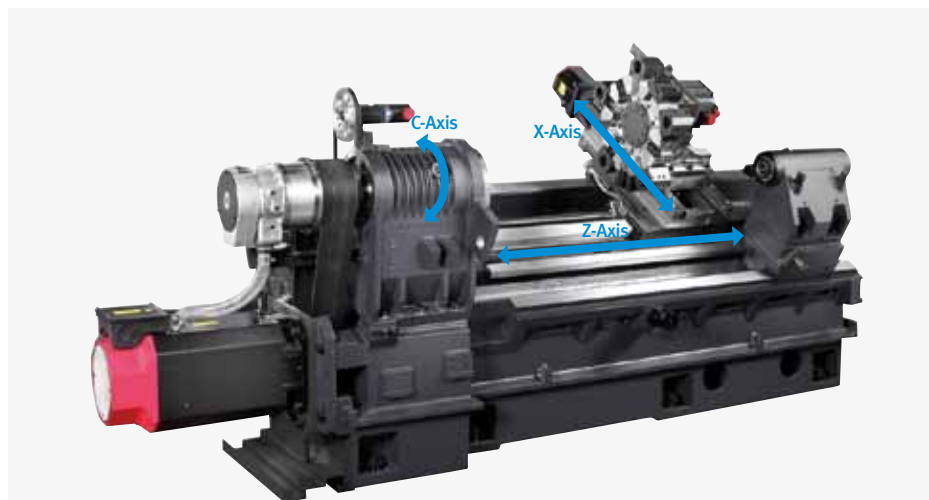


| Model group | Standard chuck size (inch) | Length of bed (mm(inch)) | | | Function |
|---|---|---|---|---|---|
| | | /300 | std. | L | |
| PUMA GT2100 | 8 | 300 (11.8) | 550 (21.7) | - | 2 axis/M |
| PUMA GT2100B | 10 | - | 550 (21.7) | - | 2 axis/M |
| PUMA GT2600 | 10 | - | 650 (25.6) | 1050 (41.3) | 2 axis/M |

| Model group | Travel (mm(inch)) | | Rapid traverse rate (m/min(ipm)) | |
|---|---|---|---|---|
| | X-Axis | Z-Axis | X-Axis | Z-Axis |
| PUMA GT2100/300 | 230 (9.1) | 330 (13.0) | 24 (945) | 30 (1181) |
| PUMA GT2100 | | 580 (22.8) | | |
| PUMA GT2100B | | | | |
| PUMA GT2600 | 265 (10.4) | 680 (26.8) | | |
| PUMA GT2600L | | 1100 (43.3) | | |

## Machining Area

PUMA GT Series forms the largest machining area in its class to yield the maximum productivity with the minimum costs.



Max. Φ460 mm (18.1 inch)

Max. 1078 mm (42.4 inch)
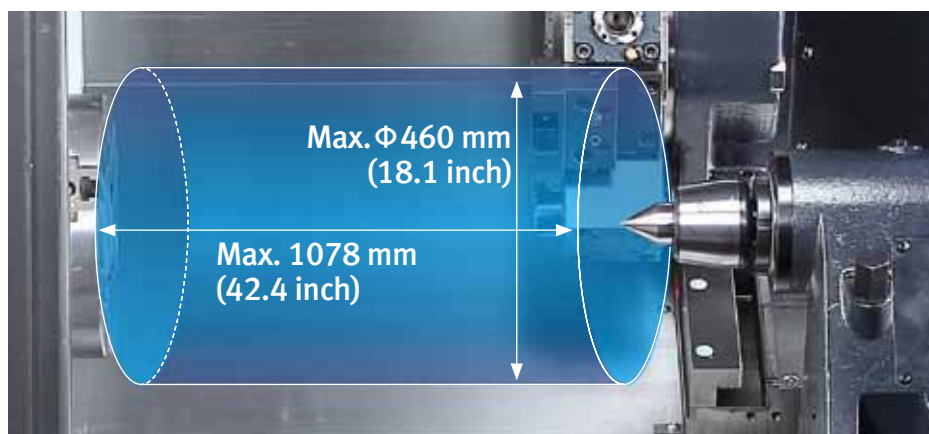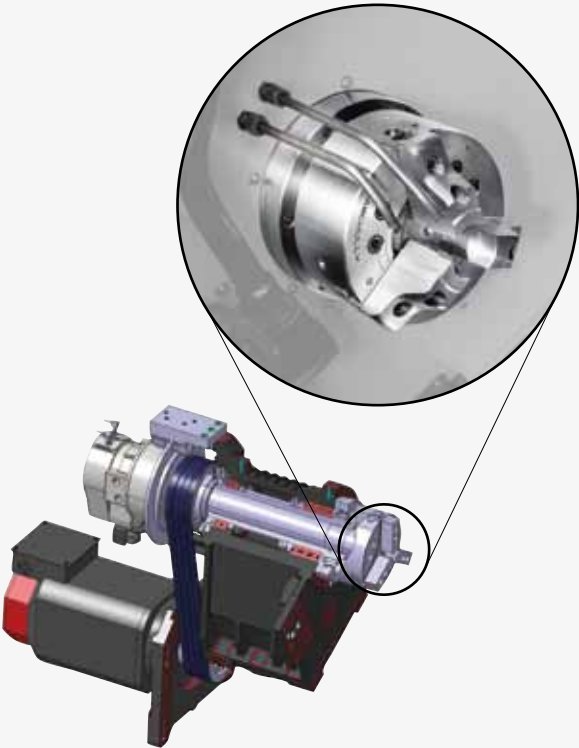
| Model group (unit : mm(inch) ) | Max. turning dia. (2axis/M) | Bar working dia. | Max. turning length (2axis/M) |
|---|---|---|---|
| PUMA GT2100/300 | 390 / 300 (15.4 / 11.8) | 65 (2.6) | 312 / 263 (12.3 / 10.4) |
| PUMA GT2100 | | | 562 / 513 (22.1 / 20.2) |
| PUMA GT2100B | | 81 (3.2) | 550 / 501 (21.7 / 19.7) |
| PUMA GT2600 | 460 / 410 (18.1 / 16.1) | | 658 / 610 (25.9 / 24.0) |
| PUMA GT2600L | | | 1078 / 1030 (42.4 / 40.6) |

## Spindle

Design of low-inertia spindle saves acceleration/deceleration time while improving productivity, and realizes powerful cutting with the motor of highest power in its



**Max. spindle speed**

# 3500 r/min

**Max. spindle power**

# 22 kW (30 hp)
**(30 min. rating)**

**Max. spindle torque**

# 622 N·m (459 lbf ft)

**\*PUMA GT2600 specification**

| Model group | Spindle speed (r/min) | Power (kW(hp)) | Toruqe (N·m(lbf ft)) | Condition |
|---|---|---|---|---|
| PUMA GT2100 | 4500 | 18.5 / 15 (25 / 20) | 313 / 190 (230 / 140) | 15 min / cont. |
| PUMA GT2100B | 3500 | 18.5 / 15 (25 / 20) | 401 / 244 (296 / 180) | 15 min / cont. |
| PUMA GT2600 | 3500 | 22 / 18.5 (30 / 20) | 622 / 523 (459 / 386) | 30 min / cont. |

## Tailstock

High-rigidity tailstock is mounted to stably support thin and long workpiece.



| Model group (mm(inch)) | Tailstock travel | Quill dia | Quill travel |
|---|---|---|---|
| PUMA GT2100/B | 580 (22.8) | 80 (3.1) | 80 (3.1) |
| PUMA GT2600 | 680 (26.8) | 100 (3.9) | 100 (3.9) |
| PUMA GT2600L | 1100 (43.3) | 100 (3.9) | 100 (3.9) |

* Tailstock is not compatible with PUMA GT100/300 model.

## Turret

Rotation of the turret is controlled by the servo motor for prompt and correct selection of tools.

## Turret

The servo motor controls rotation of the turret for the purpose of guaranteeing rapid rotation and correct position. The milling turret including rotary tools features a BMT type of design for higher rigidity. In addition, the minimization of thermal error due to oil and air lubrication of the rotary tools delivers the best milling, drilling and tapping performance in its class.

**2 axis turret**

**PUMA GT2100**
**- Number of tool
  stations : 12 st**

**PUMA GT2100B
PUMA GT2600**
**- Number of tool
  stations :
  10 st / 12 st** option

**BMT milling turret**

**PUMA GT2100M
PUMA GT2600M**
**- BMT 55P**
**-Number of tool
  stations :  : 12 st**

## Cutting Performance

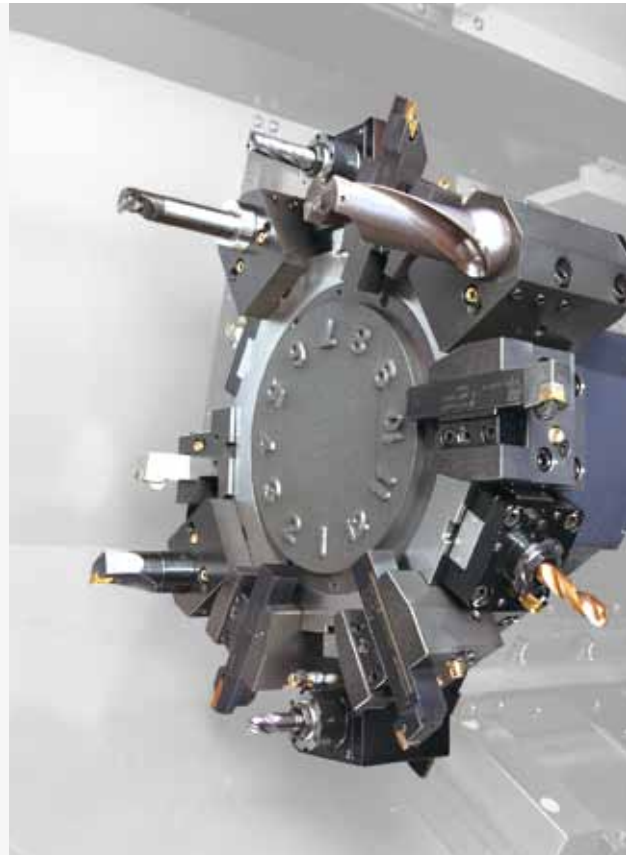Multi-functionality including end milling, face milling, drilling, tapping, etc. offers better machining performance while minimizing work setting.

**OD turning**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Chip removal rate | cm3/min (inch3/min) | 551 (33.6) | 693 (42.3) |
| Cutting speed | m/min (ipm) | 210 (8278) | 210 (8278) |
| Feedrate | mm/rev (ipr) | 0.55 (0.02) | 0.55 (0.02) |
| Spindle speed | r/min | 965 | 338 |
| Cutting depth | mm (inch) | 4.5 (0.18) | 6 (0.24) |

**ID turning (Rough cutting)**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Cutting speed | m/min (ipm) | 270 (10630) | 270 (10630) |
| Feedrate | mm/rev (ipr) | 0.3 (0.01) | 0.3 (0.01) |
| Spindle speed | r/min | 1131 | 1131 |
| Cutting depth | mm (inch) | 3 (0.1) | 3 (0.1) |
| Tool length | length / dia. | 3.5D | 3.5D |

**U drilling (2axis)**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Chip removal rate | cm3/min (inch3/min) | 567 (34.6) | 914 (55.8) |
| Cutting speed | m/min (ipm) | 200 (7874) | 200 (7874) |
| Feedrate | mm/rev (ipr) | 0.18 (0.007) | 0.29 (0.011) |
| Spindle speed | r/min | 1011 | 1011 |
| U drill dia. | mm (inch) | 63 (2.5) | 63 (2.5) |

**Face milling**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Chip removal rate | cm3/min (inch3/min) | 47.9 (2.9) | |
| Cutting speed | m/min (ipm) | 120 (4724) | |
| Feedrate | m/min (ipm) | 190 (7481) | |
| Spindle speed | r/min | 606 | |
| Cutting depth | mm (inch) | 4 (0.16) | |
| Face mill dia. | mm (inch) | 63 (2.5) | |

**End milling**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Chip removal rate | cm3/min (inch3/min) | 90 (5.5) | |
| Cutting speed | m/min (ipm) | 60 (2362) | |
| Feedrate | m/min (ipm) | 250 (9843) | |
| Spindle speed | r/min | 1060 | |
| Cutting depth | mm (inch) | 20 (0.7) | |
| End mill dia. | mm (inch) | 18 (0.7) | |

**Tapping**

|  | unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Tap size | | M20 x P2.5 | |
| Cutting speed | m/min (ipm) | 15 (591) | |
| Feedrate | m/min (ipm) | 2.5 (98.4) | |
| Spindle speed | r/min | 240 | |

* The results, indicated in this catalogue are provides as example. They may not be obtained due to differences in cutting conditions and environmental conditions during measurement.

## Standard / Optional Specifications

Diverse optional devices and features are available to meet specific customer requirements.

| NO. | Description | Features | PUMA GT2100/300 | PUMA GT2100 | PUMA GT2100B |
|---|---|---|---|---|---|
| 1 | Chuck | 8 inch | ● | ● | X |
| 2 | | 10 inch | ○ | ○ | ● |
| 3 | | 12 inch | X | X | X |
| 4 | | No chuck | ○ | ○ | ○ |
| 5 | Jaw | Soft Jaw | ● | ● | ● |
| 6 | | Hard Jaw | ○ | ○ | ○ |
| 7 | Chucking Option | DUAL PRESSURE CHUCKING | ○ | ○ | ○ |
| 8 | | CHUCK CLAMP CONFIRMATION | ○ | ○ | ○ |
| 9 | Steady rest | Hydraulic (Φ11 ~ Φ200) | X | △ | △ |
| 10 | | Programmable (Φ11 ~ Φ200) | X | △ | △ |
| 11 | V stand | V stand for shaft workpiece | ○ | ○ | ○ |
| 12 | Tailstock | Mannual | X | ● | ● |
| 13 | | Programmable | X | ○ | ○ |
| 14 | | Live center | X | ● | ● |
| 15 | | Built-in dead center | X | ○ | ○ |
| 16 | Coolant Pump | 1.5 bar | ● | ● | ● |
| 17 | | Increase Power (4.5/7/10/14.5/70 bar) | ○ | ○ | ○ |
| 18 | Coolant options | Oil skimmer | ○ | ○ | ○ |
| 19 | | Coolant chiller | ○ | ○ | ○ |
| 20 | | Coolant pressure switch | ○ | ○ | ○ |
| 21 | | Coolant level switch | ○ | ○ | ○ |
| 22 | | Chuck coolant | ○ | ○ | ○ |
| 23 | | Coolant gun | ○ | ○ | ○ |
| 24 | Chip disposal options | Side type chip conveyor | ○ | ○ | ○ |
| 25 | | Rear type chip conveyor | ○ | ○ | ○ |
| 26 | | Chip bucket | ○ | ○ | ○ |
| 27 | | Air blower | ○ | ○ | ○ |
| 28 | | Mist collector interface | ○ | ○ | ○ |
| 29 | | Integrated mist collector | ○ | ○ | ○ |
| 30 | Measuring & automation | Tool setter (manual/automatic) | ○ | ○ | ○ |
| 31 | | Part catcher with parts box | ○ | ○ | ○ |
| 32 | | Part catcher with parts conveyor | ○ | ○ | ○ |
| 33 | | Auto door | ○ | ○ | ○ |
| 34 | | Bar feeder interface | ○ | ○ | ○ |
| 35 | Others | Tool load monitoring system | ○ | ○ | ○ |
| 36 | | Linear scale | ○ | ○ | ○ |
| 37 | | Signal tower | ○ | ○ | ○ |
| 38 | | Air gun | ○ | ○ | ○ |
| 39 | | Automatic power off | ○ | ○ | ○ |

| PUMA GT2100M/300 | PUMA GT2100M | PUMA GT2100MB | PUMA GT2600 | PUMA GT2600L | PUMA GT2600M | PUMA GT2600LM |
|---|---|---|---|---|---|---|
| ● | ● | X | X | X | X | X |
| ○ | ○ | ● | ● | ● | ● | ● |
| X | X | X | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ● | ● | ● | ● | ● | ● | ● |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| X | △ | △ | △ | △ | △ | △ |
| X | △ | △ | △ | △ | △ | △ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| X | ● | ● | ● | ● | ● | ● |
| X | ○ | ○ | ○ | ○ | ○ | ○ |
| X | ● | ● | ● | ● | ● | ● |
| X | ○ | ○ | ○ | ○ | ○ | ○ |
| ● | ● | ● | ● | ● | ● | ● |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | X | ○ | X |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ● | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Product Preview

**Basic information**

Basic Structure
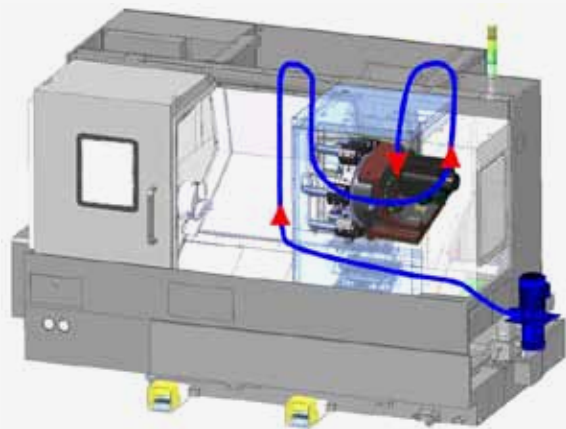Cutting
Performance

**Machine
Information**

Standard/Optional
Specifications
Applications
Diagrams
Machine & NC Unit
Specifications

**Customer Support**

# Peripheral equipments

## Coolant system



| Coolant pump | Output pressure (bar) | | filter | std./opt. |
|---|---|---|---|---|
| | 60 Hz | 50 Hz | | |
| Pump1 | 1.5 | 1 | screen filter | std. |
| Pump2 | 4.5 | 3 | screen filter | opt. |
| Pump3 | 7 | 5 | screen filter | opt. |
| Pump4 | 10 | 7 | screen filter | opt. |
| Pump5 | 14.5 | 10 | screen filter | opt. |
| Pump6 | 28 | 19.5 | screen filter | opt. |
| Pump7 | 70 | - | dual bag filter | opt. |
| Pump8 | 70 | - | paper filter | opt. |

## Chip conveyor  `option`



| Chip conveyor type | Material | Description |
|---|---|---|
| Hinged belt | Steel | Most typical type of chip conveyor. Appropriate for steel materials generating chips of length of 30 mm or more. |
| Screw | Steel | Chip conveyor with smallest footprint. Demands 80% of footprint comparing to hinged belt. |
| Magnetic scrapper | Cast iron | Chip conveyor with magnet equipped: Appropriate for cast iron workpieces generating fine chips. |

## Easy-to-clean coolant tank
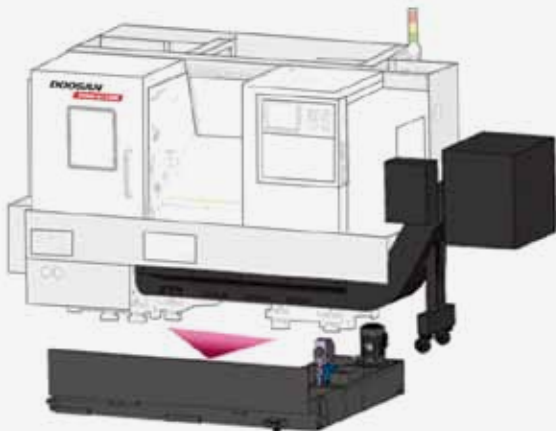


The coolant tank can be dismantled without disassembling the chip conveyor. Operating convenience is significantly enhanced.

## Oil skimmer `option`



The oil skimmer keeps coolant and lubricant isolated from each other for extending lifecycle of coolant.

## Tool setter `option`



The tool setter facilitates setting of tools, and fast and precise length compensation of abraded tool.

## Part catcher `option`



The part catcher automatically accepts parts completed of machining, and ejects them out of the system.

## Coolant chiller `option`
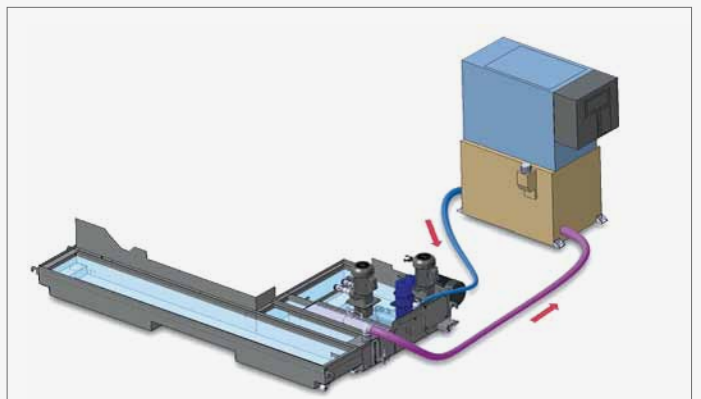


Detachable coolant chiller is recommended to keep thermal error minimal and get higher machining precision.

## Mist collector `option`



SOLUBLE
MIST CLEANER

The mist collector absorbs airborne oil vapor and fine dusts in the system to improve working environment.

## Collet chuck `option`



The collet chuck is ideal for loading workpiece of small diameter and light weight.

## Spindle Power – Torque Diagram

### Spindle(FANUC)
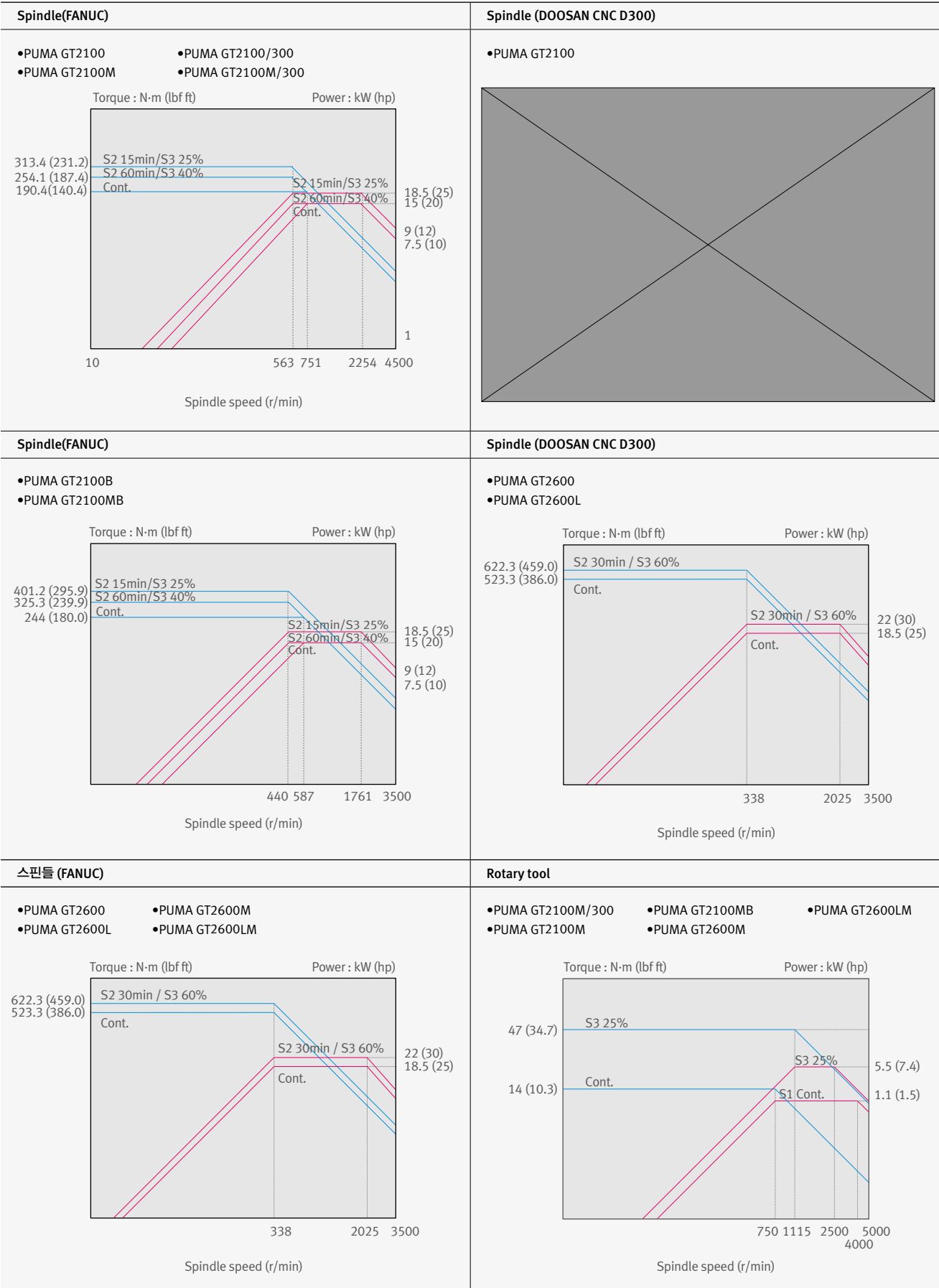
- PUMA GT2100
- PUMA GT2100M
- PUMA GT2100/300
- PUMA GT2100M/300



Torque : N·m (lbf ft)  Power : kW (hp)

313.4 (231.2)
254.1 (187.4)
190.4(140.4)

S2 15min/S3 25%
S2 60min/S3 40%
Cont.

S2 15min/S3 25%
S2 60min/S3 40%
Cont.

18.5 (25)
15 (20)

9 (12)
7.5 (10)

1

10   563 751   2254 4500

Spindle speed (r/min)

### Spindle (DOOSAN CNC D300)

- PUMA GT2100



### Spindle(FANUC)

- PUMA GT2100B
- PUMA GT2100MB



Torque : N·m (lbf ft)  Power : kW (hp)

401.2 (295.9)
325.3 (239.9)
244 (180.0)

S2 15min/S3 25%
S2 60min/S3 40%
Cont.

S2 15min/S3 25%
S2 60min/S3 40%
Cont.

18.5 (25)
15 (20)

9 (12)
7.5 (10)

440 587   1761 3500

Spindle speed (r/min)

### Spindle (DOOSAN CNC D300)

- PUMA GT2600
- PUMA GT2600L



Torque : N·m (lbf ft)  Power : kW (hp)

622.3 (459.0)
523.3 (386.0)

S2 30min / S3 60%
Cont.

S2 30min / S3 60%
Cont.

22 (30)
18.5 (25)

338   2025 3500

Spindle speed (r/min)

### 스핀들 (FANUC)

- PUMA GT2600
- PUMA GT2600L
- PUMA GT2600M
- PUMA GT2600LM



Torque : N·m (lbf ft)  Power : kW (hp)

622.3 (459.0)
523.3 (386.0)

S2 30min / S3 60%
Cont.

S2 30min / S3 60%
Cont.

22 (30)
18.5 (25)

338   2025 3500

Spindle speed (r/min)

### Rotary tool

- PUMA GT2100M/300
- PUMA GT2100M
- PUMA GT2100MB
- PUMA GT2600M
- PUMA GT2600LM



Torque : N·m (lbf ft)  Power : kW (hp)

47 (34.7)

S3 25%

S3 25%

5.5 (7.4)

14 (10.3)

Cont.

S1 Cont.

1.1 (1.5)
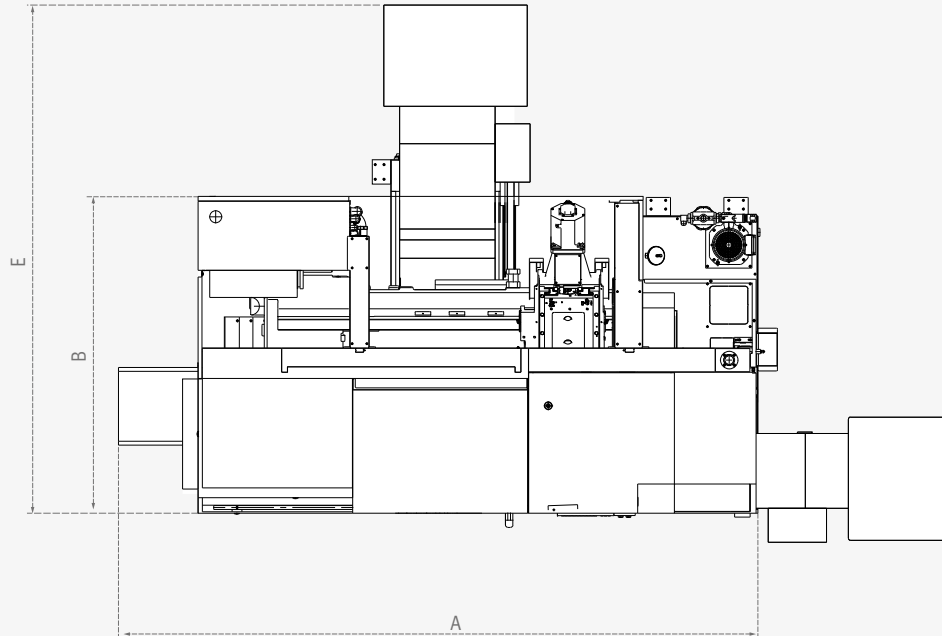
750 1115   2500   5000
4000

Spindle speed (r/min)

## External Dimensions

## PUMA GT series

Top View



Front View
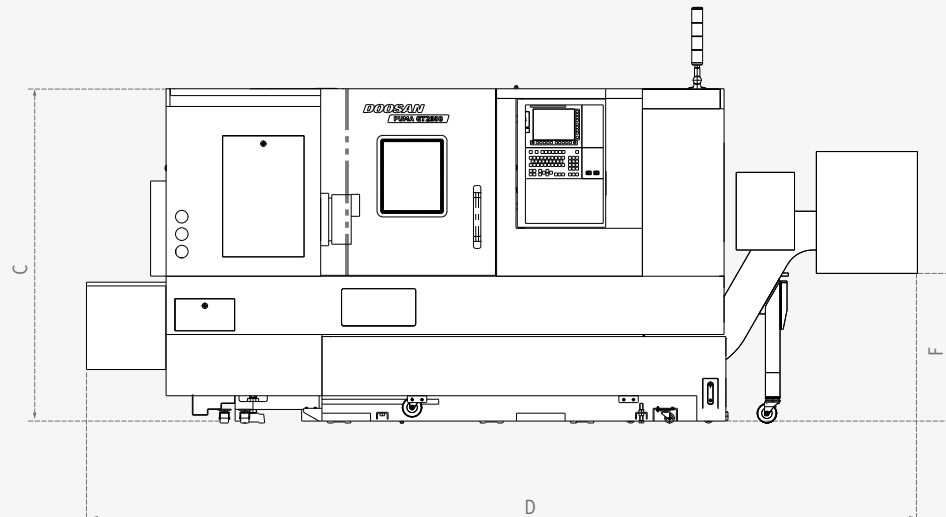


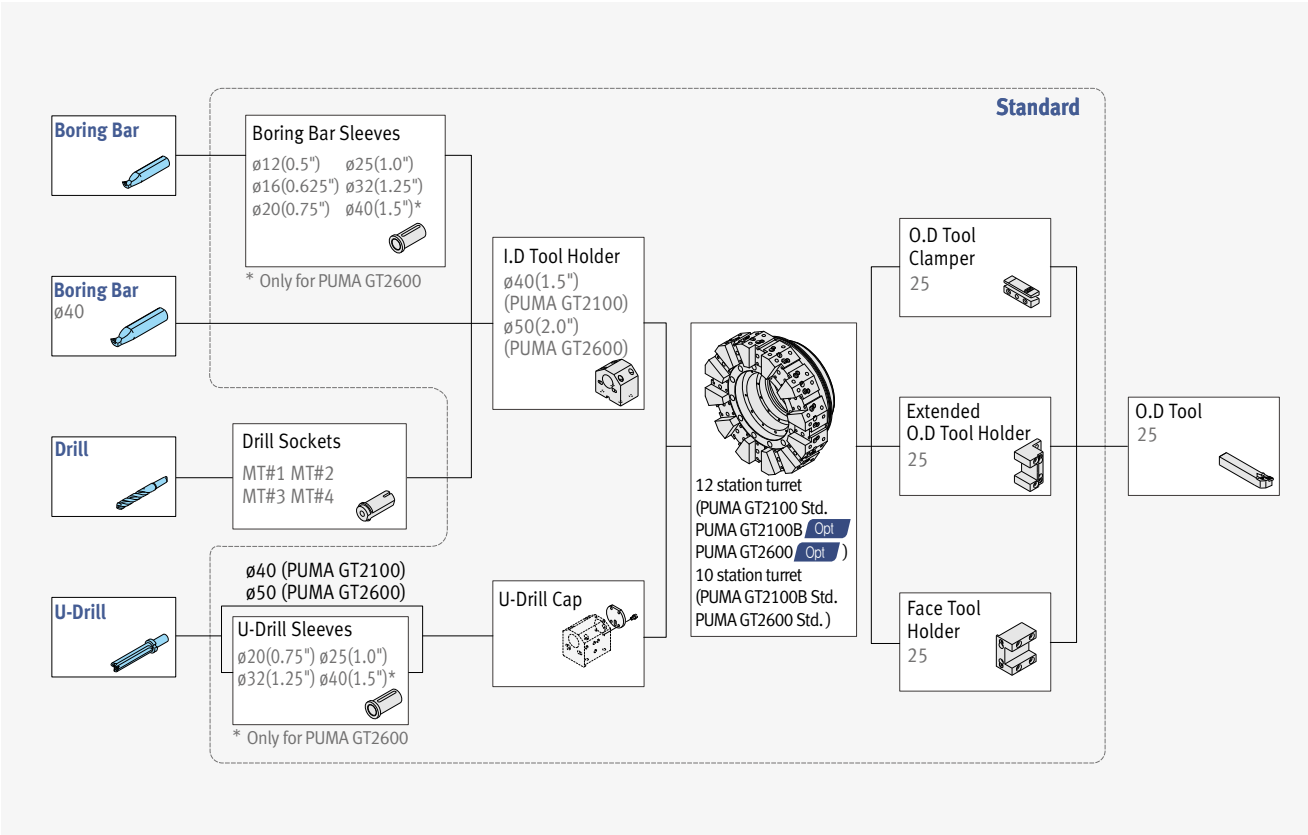| Description | | PUMA GT2100/300 | PUMA GT2100 | PUMA GT2100B | PUMA GT2600 | PUMA GT2600L |
|---|---|---|---|---|---|---|
| A (Length) | | 2285(90.0)* | 2940(115.7) | 2985(117.5) | 3290(129.5) | 3735(147.0) |
| B (Width) | | 2448(96.4)* | 1628(64.1) | 1628(64.1) | 1630(64.2) | 1630(64.2) |
| C (Height) | | 1700(66.9) | 1700(66.9) | 1700(66.9) | 1720(67.7) | 1720(67.7) |
| D (Length with side type chip conveyor) | Hinged belt | 3570(140.6) | 3895(153.3) | 3940(155.1) | 4275(168.3) | 4965(195.5) |
| | Screw | 3153(124.1) | 3478(136.9) | 3523(138.7) | 3847.5(151.5) | 4542(178.8) |
| E (Width with rear type chip conveyor) | Hinged belt | 2515(99.0) | 2588(101.9) | 2588(101.9) | 2685(105.7) | (N/A) |
| | Screw | 2348(92.4) | 2348(92.4) | 2348(92.4) | 2342(92.2) | (N/A) |
| F (Height of chip outlet)** | Hinged belt | 800(31.5) | 800(31.5) | 800(31.5) | 770(30.3) | 770(30.3) |
| | Screw | 613(24.1) | 613(24.1) | 613(24.1) | 628(24.7) | 628(24.7) |

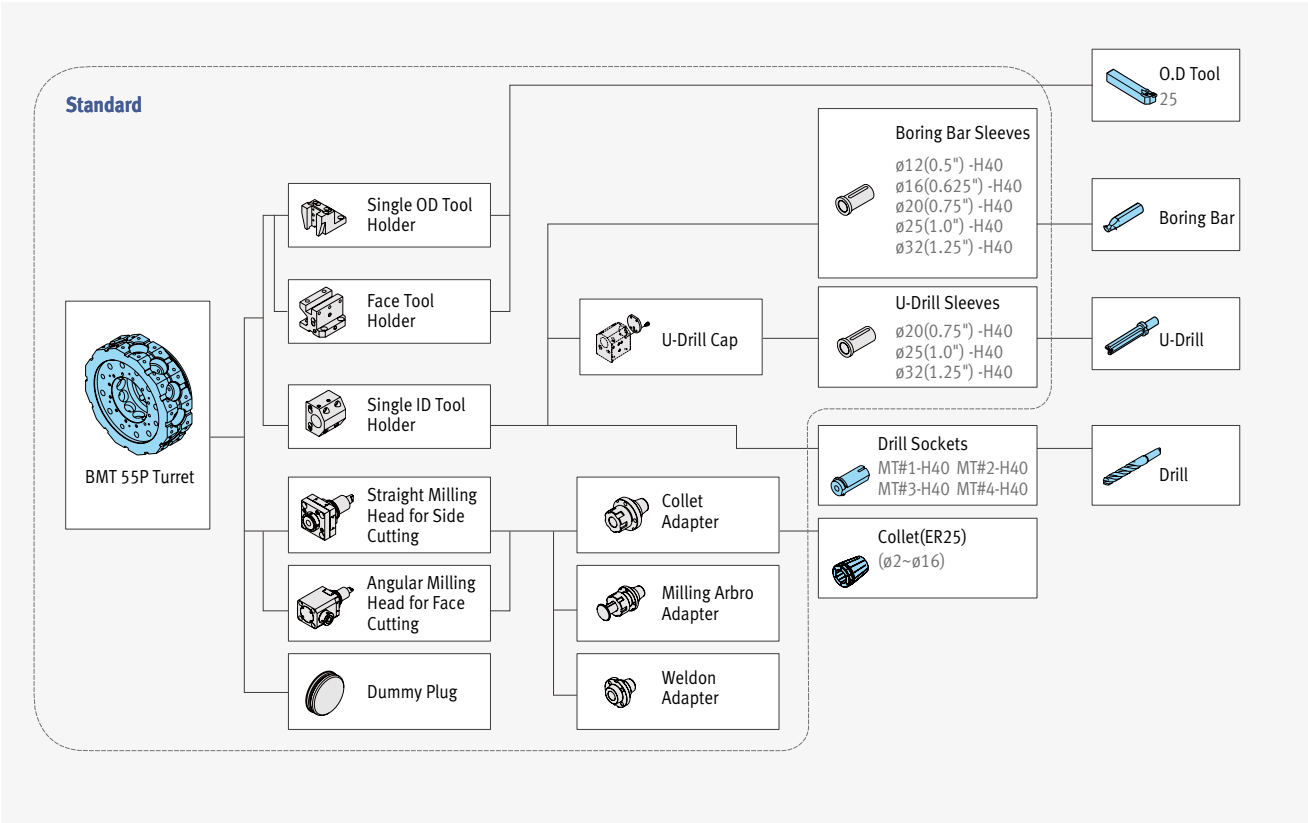*Specification with rear type coolant tank      **Specification with side type chip conveyor

Product Preview

Basic information

Basic Structure
Cutting
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**Machine**
**Information**

Standard/Optional
Specifications
Applications
Diagrams
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Specifications

Customer Support

PUMA GT
series

**Tooling system**

## PUMA GT series(2axis, 10/12station)

Unit: mm (inch)

**Standard**

Boring Bar

Boring Bar Sleeves
ø12(0.5")    ø25(1.0")
ø16(0.625") ø32(1.25")
ø20(0.75")  ø40(1.5")*

* Only for PUMA GT2600

Boring Bar
ø40

I.D Tool Holder
ø40(1.5")
(PUMA GT2100)
ø50(2.0")
(PUMA GT2600)

Drill

Drill Sockets
MT#1 MT#2
MT#3 MT#4

12 station turret
(PUMA GT2100 Std.
PUMA GT2100B `Opt`
PUMA GT2600 `Opt` )
10 station turret
(PUMA GT2100B Std.
PUMA GT2600 Std. )

O.D Tool
Clamper
25

Extended
O.D Tool Holder
25

O.D Tool
25

U-Drill

ø40 (PUMA GT2100)
ø50 (PUMA GT2600)
U-Drill Sleeves
ø20(0.75") ø25(1.0")
ø32(1.25") ø40(1.5")*

* Only for PUMA GT2600

U-Drill Cap

Face Tool
Holder
25

## PUMA GT series (M, 12station, BMT55P)

Unit: mm (inch)

**Standard**

O.D Tool
25

BMT 55P Turret

Single OD Tool
Holder

Face Tool
Holder

Single ID Tool
Holder

Straight Milling
Head for Side
Cutting

Angular Milling
Head for Face
Cutting

Dummy Plug

U-Drill Cap

Collet
Adapter

Milling Arbro
Adapter

Weldon
Adapter

Boring Bar Sleeves
ø12(0.5") -H40
ø16(0.625") -H40
ø20(0.75") -H40
ø25(1.0") -H40
ø32(1.25") -H40

U-Drill Sleeves
ø20(0.75") -H40
ø25(1.0") -H40
ø32(1.25") -H40

Drill Sockets
MT#1-H40  MT#2-H40
MT#3-H40  MT#4-H40
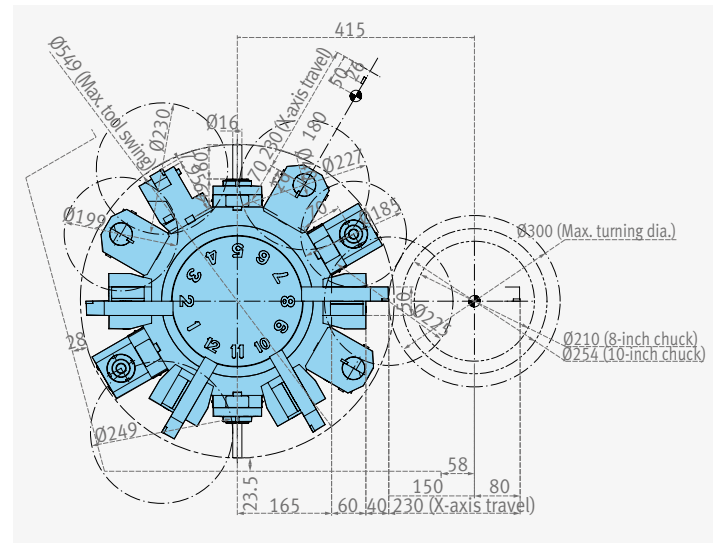
Collet(ER25)
(ø2~ø16)

Boring Bar
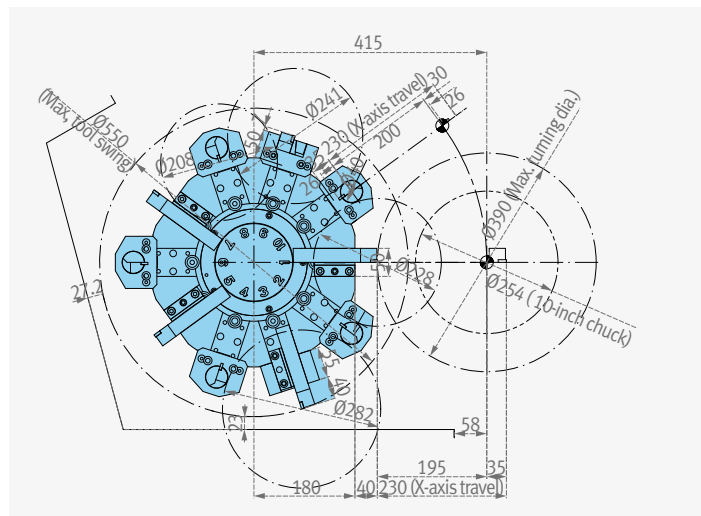
U-Drill

Drill

## Tool Interference Diagram

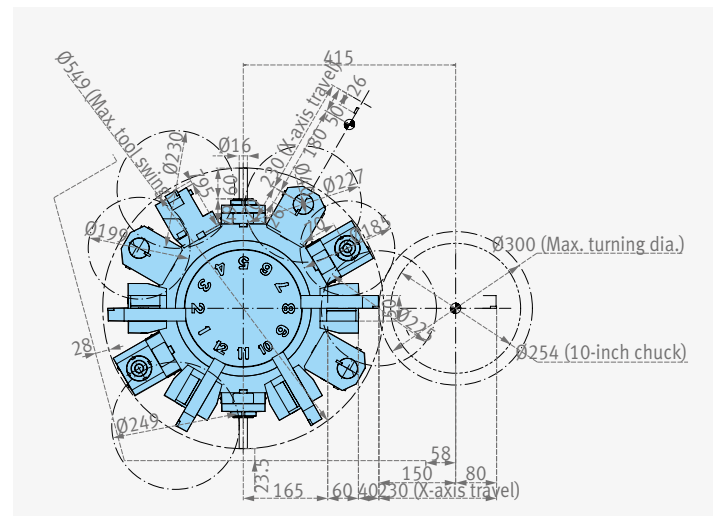### PUMA GT2100 (2axis, 12station)
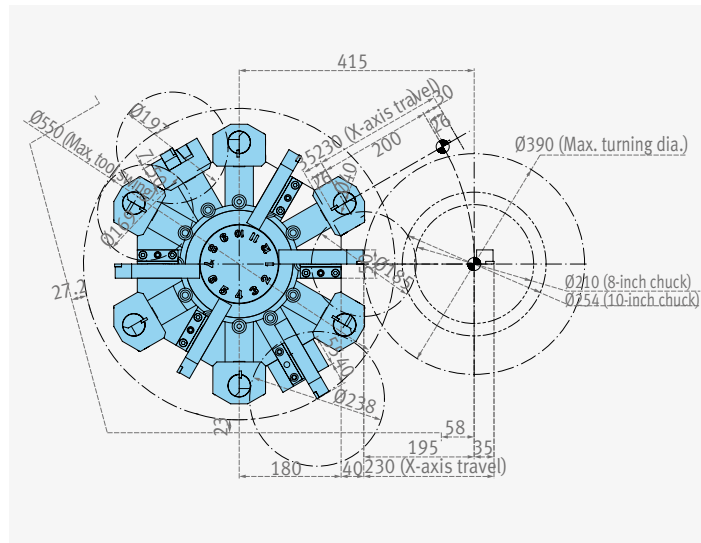

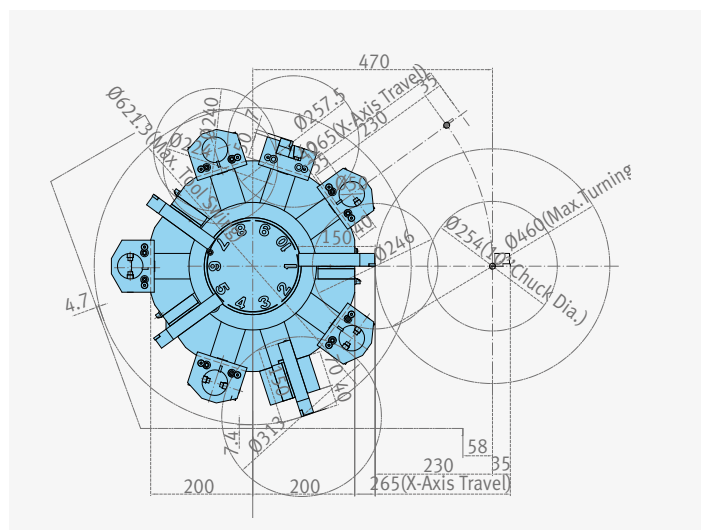
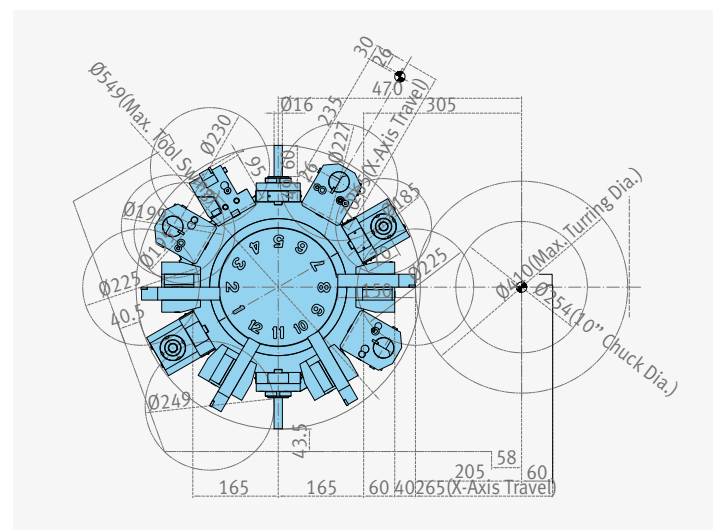### PUMA GT2100M (M, 12station, BMT55P)



### PUMA GT2100B (2axis, 10station)



### PUMA GT2100MB (M, 12station, BMT55P)



### PUMA GT2600 (2axis, 10station)



### PUMA GT2600M (M, 12station, BMT55P)

**Product Preview**

**Basic information**

Basic Structure
Cutting
Performance

**Machine Information**

Standard/Optional
Specifications
Applications
Diagrams
Machine & NC Unit
Specifications

**Customer Support**

## Working Range Diagram

## PUMA GT series(2axis)

Unit: mm (inch)

### OD Clamper
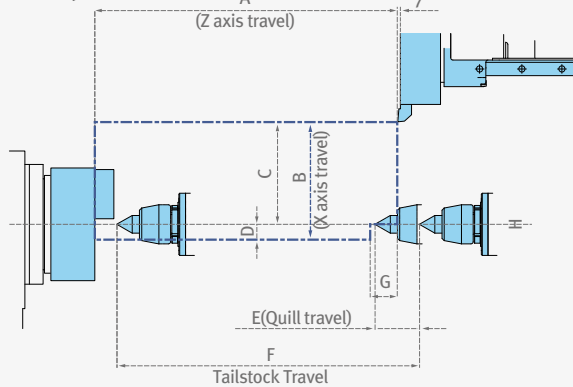


| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100/300 | 330 (13.0) | 230 (9.1) | 195 (7.7) | 35 (1.4) | - | - | 0 | -35 (1.4) |
| PUMA GT2100 PUMA GT2100B | 580 (22.8) | 230 (9.1) | 195 (7.7) | 35 (1.4) | 80 (3.1) | 580 (22.8) | 63 (2.5) | -20 (0.8) |
| PUMA GT2600 | 680 (26.8) | 230 (9.1) | 230 (9.1) | 35 (1.4) | 100 (3.9) | 680 (26.8) | 61 (2.4) | 0 |
| PUMA GT2600L | 1100 (43.3) | 230 (9.1) | 230 (9.1) | 35 (1.4) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | 0 |

### ID Holder
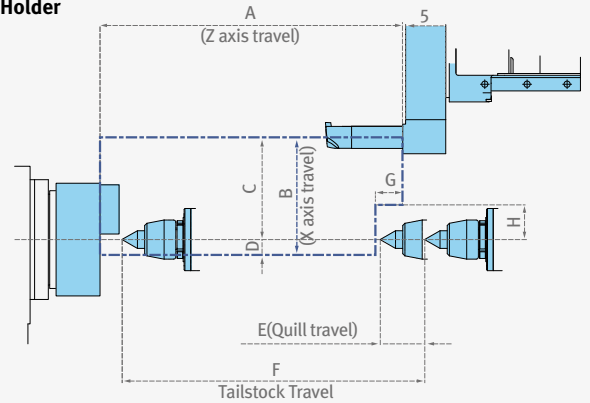


| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100/300 | 330 (13.0) | 230 (9.1) | 200 (7.9) | 30 (1.2) | - | - | 0 | -30 (1.2) |
| PUMA GT2100 PUMA GT2100B | 580 (22.8) | 230 (9.1) | 200 (7.9) | 30 (1.2) | 80 (3.1) | 580 (22.8) | 63 (2.5) | -15 (0.6) |
| PUMA GT2600 | 680 (26.8) | 230 (9.1) | 230 (9.1) | 35 (1.4) | 100 (3.9) | 680 (26.8) | 61 (2.4) | 78 (3.1) |
| PUMA GT2600L | 1100 (43.3) | 230 (9.1) | 230 (9.1) | 35 (1.4) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | 78 (3.1) |

### Extended OD Holder
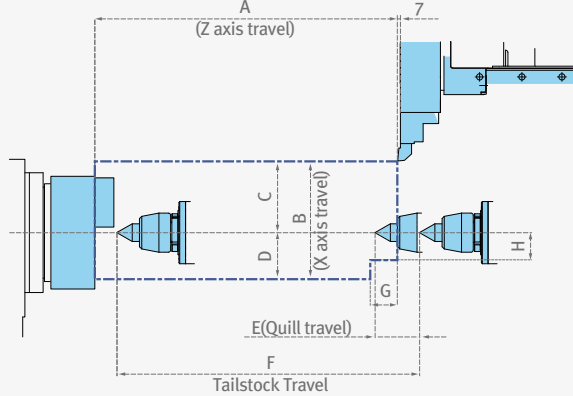


| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100/300 | 330 (13.0) | 230 (9.1) | 140 (5.5) | 90 (3.5) | - | - | 0 | -90 (-3.5) |
| PUMA GT2100 PUMA GT2100B | 580 (22.8) | 230 (9.1) | 140 (5.5) | 90 (3.5) | 80 (3.1) | 580 (22.8) | 68 (2.7) | -75 (3.0) |
| PUMA GT2600 | 680 (26.8) | 230 (9.1) | 160 (6.3) | 105 (4.1) | 100 (3.9) | 680 (26.8) | 61 (2.4) | -62 (2.4) |
| PUMA GT2600L | 1100 (43.3) | 230 (9.1) | 160 (6.3) | 105 (4.1) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | -62 (2.4) |

### Face Tool Holder
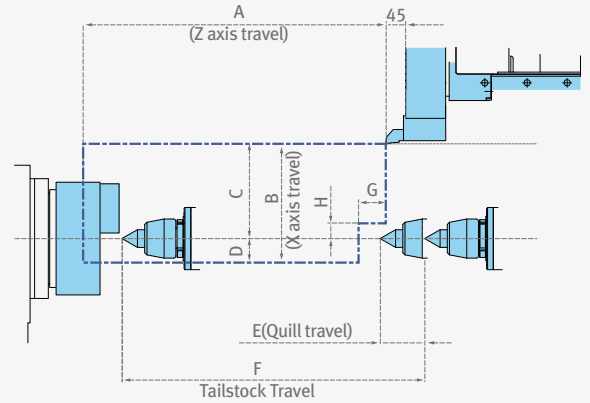


| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100/300 | 330 (13.0) | 230 (9.1) | 178 (7.0) | 52 (2.0) | - | - | 0 | -30 (1.2) |
| PUMA GT2100 PUMA GT2100B | 580 (22.8) | 230 (9.1) | 178 (7.0) | 52 (2.0) | 80 (3.1) | 580 (22.8) | 68 (2.7) | -37 (1.5) |
| PUMA GT2600 | 680 (26.8) | 230 (9.1) | 213 (8.4) | 52 (2.0) | 100 (3.9) | 680 (26.8) | 61 (2.4) | 35 (1.4) |
| PUMA GT2600L | 1100 (43.3) | 230 (9.1) | 213 (8.4) | 52 (2.0) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | 35 (1.4) |

*for H : (-) Downward direction of spindle center line
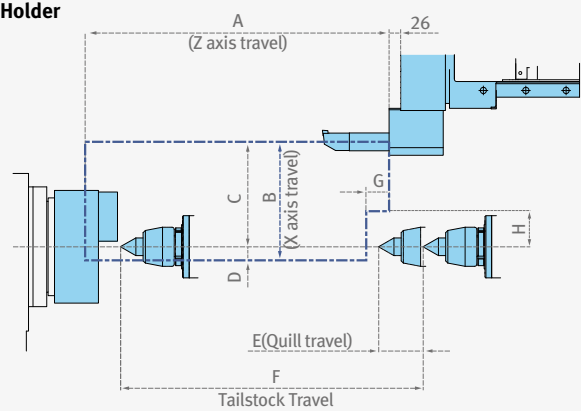(+) Upward direction of spindle center line
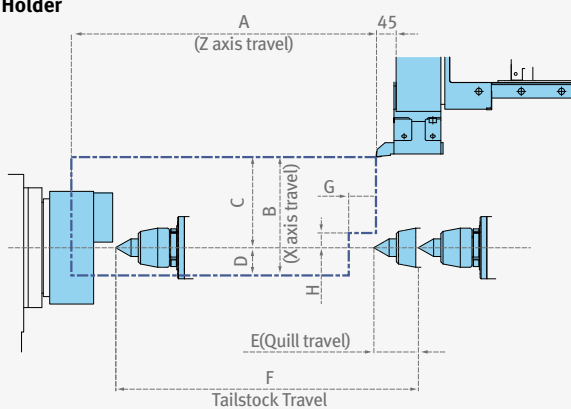
# PUMA GT series(M, BMT55P)

## OD Holder

A — 38
(Z axis travel)
C / B (X axis travel) / D / H / G
E(Quill travel)
F
Tailstock Travel
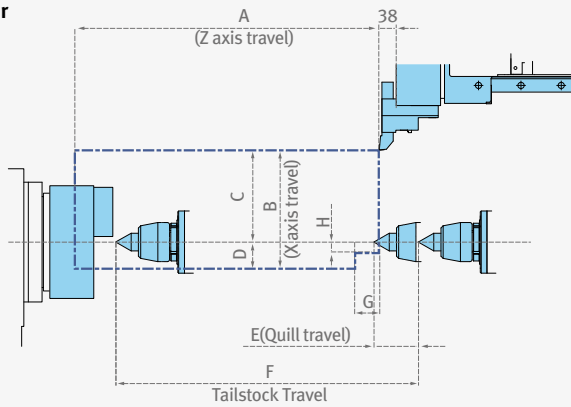
| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100M/300 | 330 (13.0) | 230 (9.1) | 150 (5.9) | 80 (3.1) | - | - | 0 | -80 (3.1) |
| PUMA GT2100 M PUMA GT2100MB | 580 (22.8) | 230 (9.1) | 150 (5.9) | 80 (3.1) | 80 (3.1) | 580 (22.8) | 77 (3.0) | -60 (2.4) |
| PUMA GT2600M | 680 (26.8) | 265 (10.4) | 205 (8.1) | 60 (2.4) | 100 (3.9) | 680 (26.8) | 53 (2.1) | -25 (1.0) |
| PUMA GT2600LM | 1100 (43.3) | 265 (10.4) | 205 (8.1) | 60 (2.4) | 100 (3.9) | 1100 (43.3) | 53 (2.1) | -25 (1.0) |

## ID Holder

A — 26
(Z axis travel)
C / B (X axis travel) / D / G / H
E(Quill travel)
F
Tailstock Travel

| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100M/300 | 330 (13.0) | 230 (9.1) | 180 (7.1) | 50 (2.0) | - | - | 0 | -50 (2.0) |
| PUMA GT2100 M PUMA GT2100MB | 580 (22.8) | 230 (9.1) | 180 (7.1) | 50 (2.0) | 80 (3.1) | 580 (22.8) | 77 (3.0) | -30 (1.2) |
| PUMA GT2600M | 680 (26.8) | 265 (10.4) | 235 (9.3) | 30 (1.2) | 100 (3.9) | 680 (26.8) | 51 (2.0) | 80 (3.1) |
| PUMA GT2600LM | 1100 (43.3) | 265 (10.4) | 235 (9.3) | 30 (1.2) | 100 (3.9) | 1100 (43.3) | 51 (2.0) | 80 (3.1) |

## Face Tool Holder

A — 45
(Z axis travel)
C / B (X axis travel) / D / G / H
E(Quill travel)
F
Tailstock Travel

| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100M/300 | 330 (13.0) | 230 (9.1) | 148 (5.8) | 82 (3.2) | - | - | 77 (3.0) | -65 (2.6) |
| PUMA GT2100 M PUMA GT2100MB | 580 (22.8) | 230 (9.1) | 148 (5.8) | 82 (3.2) | 80 (3.1) | 580 (22.8) | 77 (3.0) | -65 (2.6) |
| PUMA GT2600M | 680 (26.8) | 265 (10.4) | 203 (8.0) | 62 (2.4) | 100 (3.9) | 680 (26.8) | 61 (2.4) | 33 (1.3) |
| PUMA GT2600LM | 1100 (43.3) | 265 (10.4) | 203 (8.0) | 62 (2.4) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | 33 (1.3) |

## Straight Milling Holder

A
(Z axis travel)
C / B (X axis travel) / D / G / H
E(Quill travel)
F
Tailstock Travel
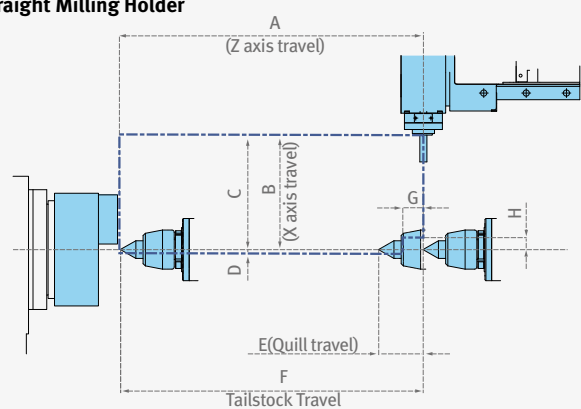
| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100M/300 | 330 (13.0) | 230 (9.1) | 201 (7.9) | 29 (1.1) | - | - | 77 (3.0) | -9 (0.4) |
| PUMA GT2100 M PUMA GT2100MB | 580 (22.8) | 230 (9.1) | 201 (7.9) | 29 (1.1) | 80 (3.1) | 580 (22.8) | 77 (3.0) | -9 (0.4) |
| PUMA GT2600M | 680 (26.8) | 265 (10.4) | 256 (10.1) | 9 (0.4) | 100 (3.9) | 680 (26.8) | 46 (1.8) | 26 (1.0) |
| PUMA GT2600LM | 1100 (43.3) | 265 (10.4) | 256 (10.1) | 9 (0.4) | 100 (3.9) | 1100 (43.3) | 46 (1.8) | 26 (1.0) |

## Angular Milling Holder

A — 26.5
(Z axis travel)
C / B (X axis travel) / D / G / H
E(Quill travel)
F
Tailstock Travel
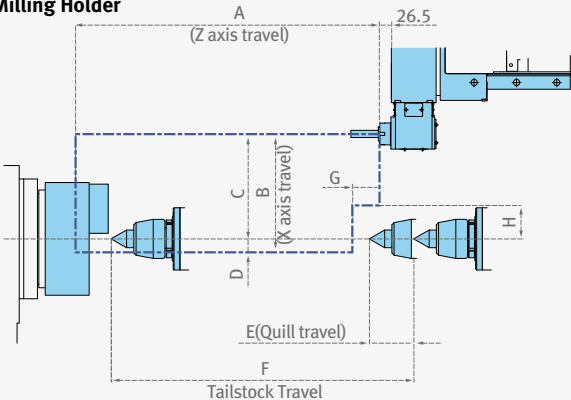
| | A | B | C | D | E | F | G | H* |
|---|---|---|---|---|---|---|---|---|
| PUMA GT2100M/300 | 330 (13.0) | 230 (9.1) | 180 (7.1) | 50 (2.0) | - | - | 77 (3.0) | -33 (1.3) |
| PUMA GT2100 M PUMA GT2100MB | 580 (22.8) | 230 (9.1) | 180 (7.1) | 50 (2.0) | 80 (3.1) | 580 (22.8) | 77 (3.0) | -33 (1.3) |
| PUMA GT2600M | 680 (26.8) | 265 (10.4) | 235 (9.3) | 30 (1.2) | 100 (3.9) | 680 (26.8) | 61 (2.4) | 75 (3.0) |
| PUMA GT2600LM | 1100 (43.3) | 265 (10.4) | 235 (9.3) | 30 (1.2) | 100 (3.9) | 1100 (43.3) | 61 (2.4) | 75 (3.0) |

*for H : (-) Downward direction of spindle center line
(+) Upward direction of spindle center line

## Machine Specifications

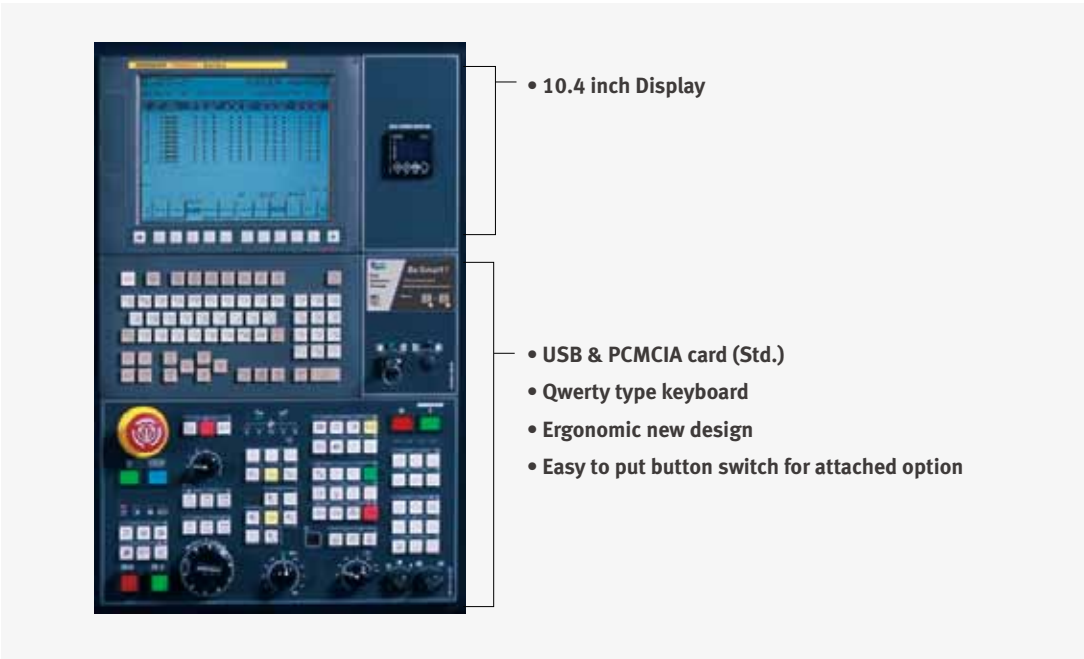| Description | mm (inch) | PUMA GT2100[/300] | PUMA GT2100M [M/300] | PUMA GT2100B | PUMA GT2100MB | PUMA GT2600[L] | PUMA GT2600M[LM] |
|---|---|---|---|---|---|---|---|
| **Capacity** — Swing over bed | mm (inch) | 600 (23.6) | | | | 630 (24.8) | |
| Swing over saddle | mm (inch) | 390 (15.4) | | | | 460 (18.1) | |
| Recommanded turning dia. | mm (inch) | 210 (8.3) | | 255 (10.0) | | 255 (10.0) | |
| Max. turning dia. | mm (inch) | 390 (15.4) | 300 (11.8) | 390 (15.4) | 390 (15.4) | 460 (18.1) | 410 (16.1) |
| Max turining length | inch | 562 [312] (22.1 [12.3]) | 513 [263] (20.2 [10.4]) | 550 (12.7) | 501 (19.7) | 658 [1078] (25.9 [42.4]) | 610 [1030] (24.0 [40.6]) |
| Chuck size | mm (inch) | 8 {10} | | 10 | | 10 {12} | |
| Bar working dia. | mm (inch) | 65 (2.6) | | 81 (3.2) | | 81 (3.2) | |
| **Travels** — Travel distance X-axis | mm (inch) | 230 (9.1) | | | | 265 (10.4) | |
| Travel distance Z-axis | mm (inch) | 580 [330] (22.8 [13.0]) | | 580 (22.8) | | 680 [1100] (26.8 [43.3]) | |
| **Feedrates** — Rapid Traverse Rate X-axis | m/min (ipm) | 24 (945) | | 24 (945) | | 24 (945) | |
| Rapid Traverse Rate Z-axis | m/min (ipm) | 30 (1181) | | 30 (1181) | | 30 (1181) | |
| **Main spindle** — Max. Spindle speed | r/min | 4500 | | 3500 | | 3500 | |
| Main spindle motor power | kW (hp) | 18.5 / 15 (25 / 20) (15min/cont.) | | | | 22 / 18.5 (30 / 25) (30min/cont.) | |
| Max. Spindle torque | N·m (lbf ft) | 313 (231) | | 401.2 (296) | | 622 (459) | |
| Spindle nose | ASA | A2-6 | | A2-8 | | A2-8 | |
| Spindle bearing diameter (Front) | mm (inch) | 110 (4.3) | | 140 (5.5) | | 140 (5.5) | |
| Spindle through hole | mm (inch) | 76 (3.0) | | 91 (3.6) | | 91 (3.6) | |
| Min. spindle Indexing angle (C-axis) | deg | - | 0.001 | - | 0.001 | - | 0.001 |
| **Turret** — No. of tool stations | ea | 12 | 12 | 10 {12} | 12 | 10 {12} | 12 |
| OD tool size | mm (inch) | 25 x 25 (1 x 1) | | | | 25 x 25 (1 x 1) | |
| Max. boring bar size | mm (inch) | 40 (1.6) | | | | 50 (2.0) | 40 (1.6) |
| Turret Indexing time (1 station swivel) | s | 0.15 | | | | 0.15 | |
| Max. Rotary tool speed | r/min | - | 5000 | - | 5000 | - | 5000 |
| Rotary tool motor power | kW (hp) | - | 5.5 (7.4) | - | 5.5 (7.4) | - | 5.5 (7.4) |
| **Tailstock** — Tailstock travel | mm (inch) | 580 [-] (22.8 [-]) | | 580 (22.8) | | 680 [1100] (26.8 [43.3]) | |
| Quill diameter | mm (inch) | 80 [-] (3.1 [-]) | | 80 (3.1) | | 100 (3.9) | |
| Quill travel | mm (inch) | 80 [-] (3.1 [-]) | | 80 (3.1) | | 100 (3.9) | |
| Quill bore taper | MT | MT#4 {#3(Dead)} [-] | | MT#4 {#3(Dead)} | | MT#5 {#4(Dead)} | |
| **Power source** — Electric power supply(rated capacity) | kVA | 29.04 | 30.43 | 29.04 | 30.43 | 38.41 | |
| **Machine Dimensions** — Length | mm (inch) | 2940 [2285*] (115.7 [90.0*]) | | 2985 (117.5) | | 3290 [3735] (129.5 [147.0]) | |
| Width | mm (inch) | 1628 [2448*] (64.1 [96.4*]) | | 1628 (64.1) | | 1630 (64.2) | |
| Height | mm (inch) | 1700 (66.9) | | 1700 (66.9) | | 1720 (67.7) | |
| Weight | kg (lbf) | 3600 [3400] (7920 [7480]) | 3700 [3500] (8140 [7700]) | 3700 (8140) | 3800 (8360) | 4700 [5700] (10340 [12540]) | 4900 [5900] (10780 [12980]) |
| **Control** — NC system | | DOOSAN-FANUC i | | | | | |

* PUMA GT2100/300 & PUMA GT2100M/300 : with Rear type coolant tank

## DOOSAN-FANUC i

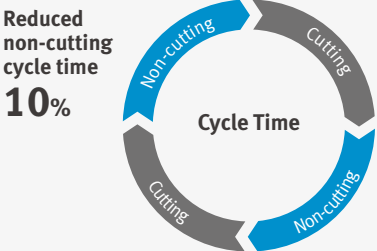Apply Fanuc CNC on the Doosan machine to fulfill best performance and productivity

### User-friendly OP Panel

The operation panel of new design enhances operating convenience by common buttons and tposiioning, and uses qwerty type keyboard for easy and fast operation.

- **10.4 inch Display**

- **USB & PCMCIA card (Std.)**
- **Qwerty type keyboard**
- **Ergonomic new design**
- **Easy to put button switch for attached option**

### Easy Operation Package

**Improve Productivity**

Reduced non-cutting cycle time

**10%**

Cycle Time

Non-cutting time during machining process is dramatically reduced to guarantee the highest productivity.

**Work management**

The function is capable of checking operation hours of the system, and quantity of finished workpieces.

**Tool load monitoring** `option`

During cutting operation, abnormal load caused by wear or damage of the tool is detected and an alarm is triggered to prevent further damage.

**Tailstock thrust force setting** `option`

Thrust of the tailstock is easily set in an interactive menu screen.

Product Preview

Basic information

Basic Structure
Cutting
Performance

**Machine Information**

Standard/Optional
Specifications
Applications
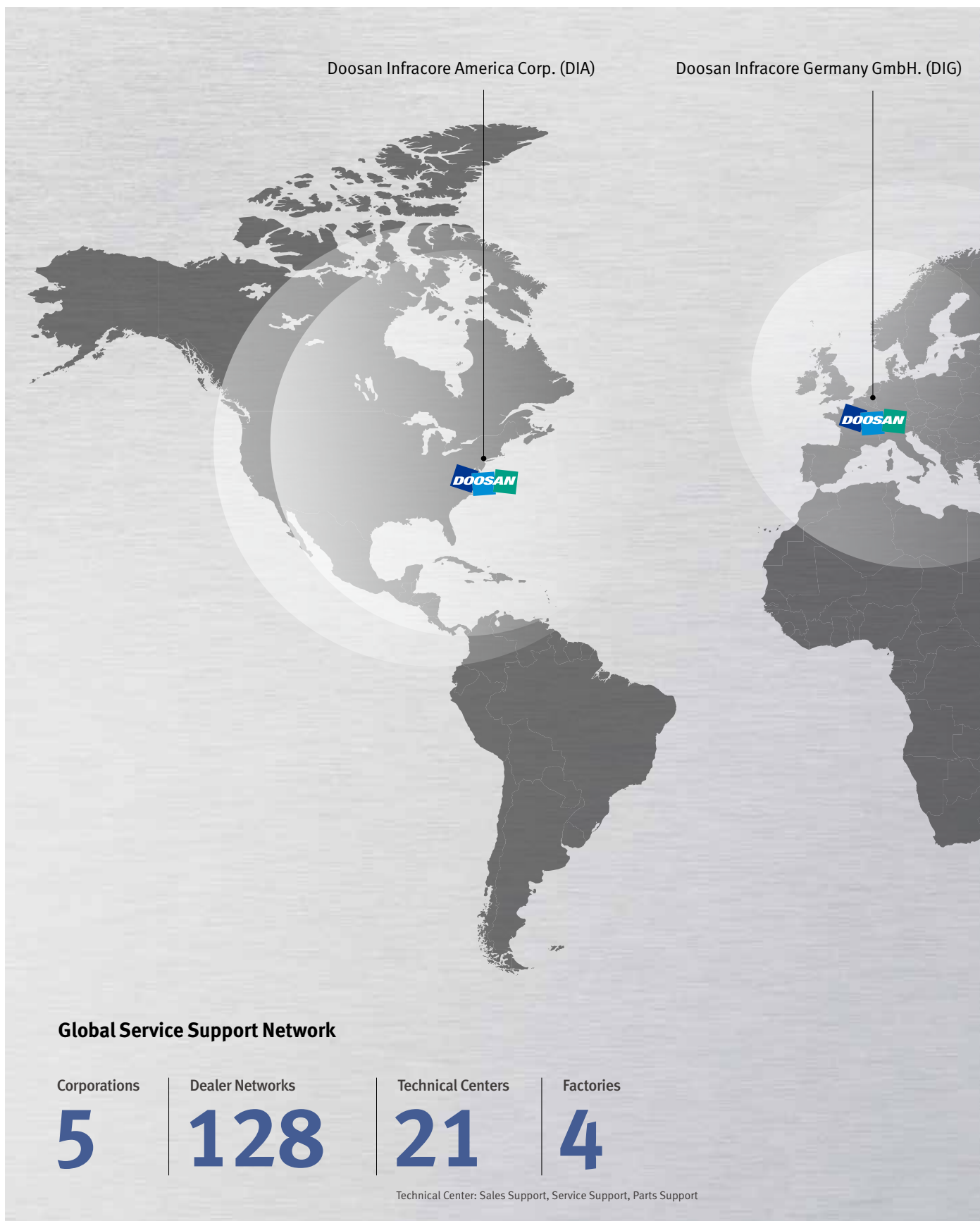Diagrams
Machine & NC Unit
Specifications

Customer Support

PUMA GT
series

## NC Unit Specifications

DOOSAN-FANUC i

● Standard ○ Optional X N/A

| | | Item | | 2-Axis | M |
|---|---|---|---|---|---|
| 1 | Controlled axis | Controlled axes | | X,Z | X,Z,C |
| 2 | | Cs contouring control | | X | ● |
| 3 | | Torque control | | ● | ● |
| 4 | | HRV2 control | | ● | ● |
| 5 | | Inch/metric conversion | | ● | ● |
| 6 | | Stored stroke check 1 | | ● | ● |
| 7 | | Stored stroke check 2,3 | | ● | ● |
| 8 | | Stored limit check before move | | ● | ● |
| 9 | | Chamfering on/off | | ● | ● |
| 10 | | Unexpected disturbance torque detection function | | ● | ● |
| 11 | | Position switch | | ● | ● |
| 12 | Operation | DNC operation | Included in RS232C interface. | ● | ● |
| 13 | | DNC operation with memory card | | ● | ● |
| 14 | | Wrong operation prevention | | ● | ● |
| 15 | | Dry run | | ● | ● |
| 16 | | Single block | | ● | ● |
| 17 | | Reference position shift | | ● | ● |
| 18 | | Handle interruption | | ● | ● |
| 19 | | Incremental feed | x1,x10,x100 | ● | ● |
| 20 | | Manual handle retrace | | ○ | ○ |
| 21 | Interpolation functions | Nano interpolation | | ● | ● |
| 22 | | Linear interpolation | | ● | ● |
| 23 | | Circular interpolation | | ● | ● |
| 24 | | Polar coordinate interpolation | | X | ● |
| 25 | | Cylindrical interpolation | | X | ● |
| 26 | | Helical interpolation | | X | ● |
| 27 | | Thread cutting, synchronous cutting | | ● | ● |
| 28 | | Multi threading | | ● | ● |
| 29 | | Thread cutting retract | | ● | ● |
| 30 | | Continuous threading | | ● | ● |
| 31 | | Variable lead thread cutting | | ● | ● |
| 32 | | Polygon machining with two spindles | | X | ● |
| 33 | | High-speed skip | Input signal is 8 points. | ● | ● |
| 34 | | 2nd reference position return | G30 | ● | ● |
| 35 | | 3rd/4th reference position return | | ● | ● |
| 36 | Feed function | Override cancel | | ● | ● |
| 37 | | AI contour control I | | ○ | ○ |
| 38 | | AI contour control II | | ○ | ○ |
| 39 | | Rapid traverse block overlap | | ● | ● |
| 40 | Program input | Optional block skip | 9 pieces | ● | ● |
| 41 | | Absolute/incremental programming | Combined use in the same block | ● | ● |
| 42 | | Diameter/Radius programming | | ● | ● |
| 43 | | Automatic coordinate system setting | | ● | ● |
| 44 | | Workpiece coordinate system | Part program storage size | ● | ● |
| 45 | | Workpiece coordinate system preset | | ● | ● |

| | Item | | 2-Axis | M |
|---|---|---|---|---|
| 46 | Program input | Direct drawing dimension programming | | ● | ● |
| 47 | | G code system | A | ● | ● |
| 48 | | G code system | B/C | ● | ● |
| 49 | | Chamfering/Corner R | | ● | ● |
| 50 | | Custom macro | | ● | ● |
| 51 | | Addition of custom macro common variables | #100 - #199, #500 - #999 | ● | ● |
| 52 | | Interruption type custom macro | | ● | ● |
| 53 | | Canned cycle | | ● | ● |
| 54 | | Multiple repetitive cycles | G70~G76 | ● | ● |
| 55 | | Multiple repetitive cycles II | Pocket profile | ● | ● |
| 56 | | Canned cycle for drilling | | ● | ● |
| 57 | | Coordinate system shift | | ● | ● |
| 58 | | Direct input of coordinate system shift | | ● | ● |
| 59 | | Pattern data input | | ● | ● |
| 60 | Operation Guidance Function | EZ Guidei (Conversational Programming Solution) | | ● | ● |
| 61 | | EZ Operation package | | ● | ● |
| 62 | Auxiliary/Spindle speed function | Constant surface speed control | | ● | ● |
| 63 | | Spindle override | 0 - 150% | ● | ● |
| 64 | | Spindle orientation | | ● | ● |
| 65 | | Rigid tap | | ● | ● |
| 66 | | Arbitrary speed threading | | ○ | ○ |
| 67 | Tool function/ Tool compensation | Tool offset pairs | 64-pairs | ● | ● |
| 68 | | | 99-pairs | ○ | ○ |
| 69 | | Tool offset | | ● | ● |
| 70 | | Tool radius/ Tool nose radius compensation | | ● | ● |
| 71 | | Tool geometry/wear compensation | | ● | ● |
| 72 | | Automatic tool offset | | ● | ● |
| 73 | | Direct input of offset value measured B | | ● | ● |
| 74 | | Tool life management | | ● | ● |
| 75 | Accuracy compensation function | | | ● | ● |
| 76 | | Stored pitch error compensation | | ● | ● |
| 77 | Editing operation | Part program storage size & Number of registerable programs | 1280M(512KB)_400 programs | ● | ● |
| 78 | | | 5120M(2MB)_400 programs | ○ | ○ |
| 79 | | Program protect | | ● | ● |
| 80 | | Password function | | ● | ● |
| 81 | Data input/output | Fast data server | | ○ | ○ |
| 82 | | External data input | | ● | ● |
| 83 | | Memory card input/output | | ● | ● |
| 84 | | USB memory input/output | | ● | ● |
| 85 | | Automatic data backup | | ○ | ○ |
| 86 | Interface function | Embedded Ethernet | | ● | ● |
| 87 | | Fast Ethernet | | ○ | ○ |
| 88 | Others | Display unit | 10.4" color LCD | ● | ● |
| 89 | | Robot interface | with PMC I/O module | ○ | ○ |
| 90 | | | with PROFIBUS-DP | ○ | ○ |

# Responding to Customers Anytime, Anywhere



Doosan Infracore America Corp. (DIA)

Doosan Infracore Germany GmbH. (DIG)

## Global Service Support Network

| Corporations | Dealer Networks | Technical Centers | Factories |
|---|---|---|---|
| **5** | **128** | **21** | **4** |

Technical Center: Sales Support, Service Support, Parts Support

**Doosan Machine Tools' Global Network, Responding to Customer's Needs nearby, Anytime, Anywhere**

Doosan machine tools provides a system-based professional support service before
and after the machine tool sale by responding quickly and efficiently to customers' demands.
By supplying spare parts, product training, field service and technical support, we can provide top class support to
our customers around the world.
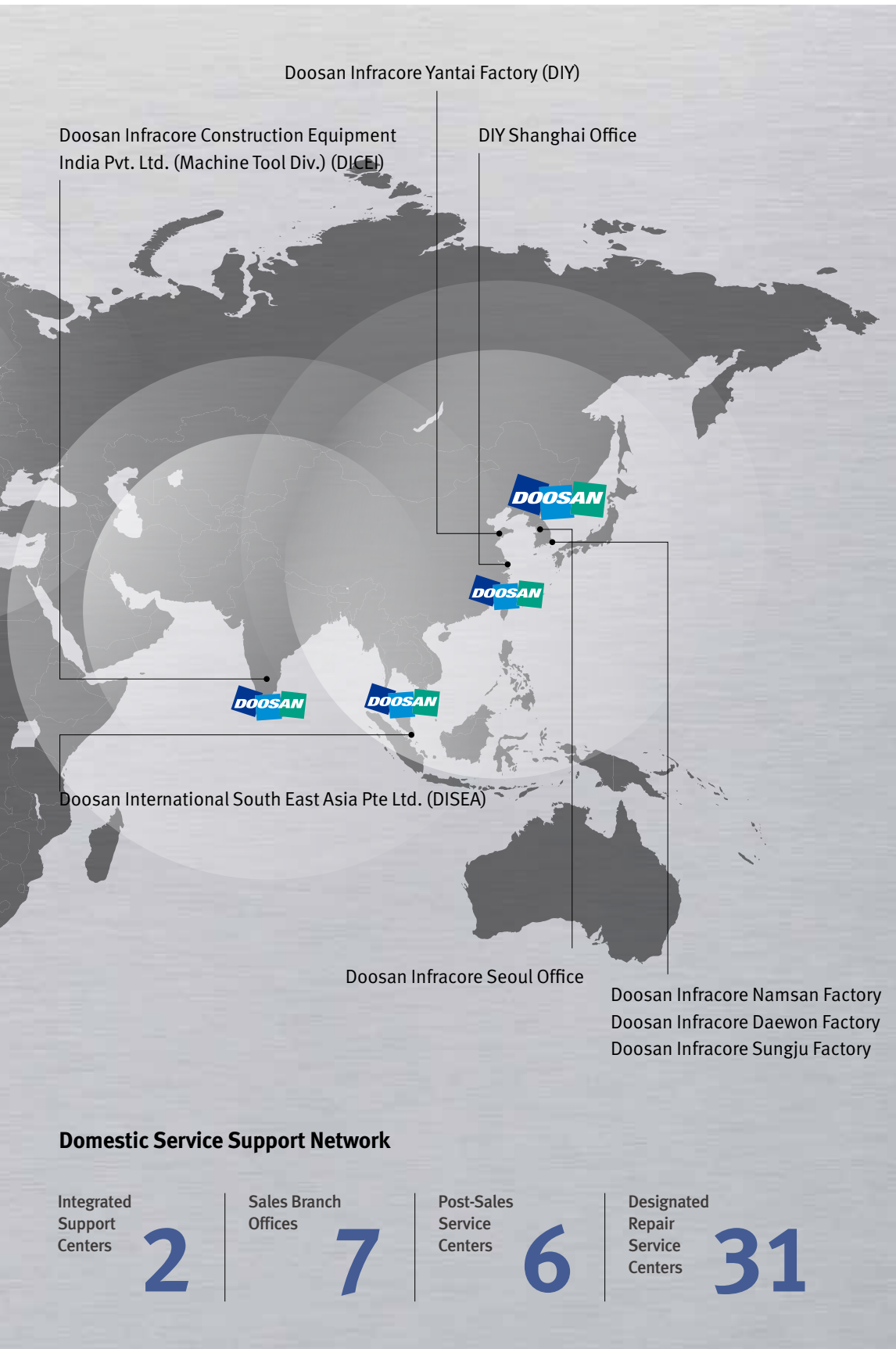
## Customer Support Service

We help customers to achieve success by providing a variety of professional services from pre-sales consultancy to post-sales support.

### Supplying Parts

- Supplying a wide range of original Doosan spare parts
- Parts repair service

### Field Services

- On site service
- Machine installation and testing
- Scheduled preventive maintenance
- Machine repair

### Technical Support

- Supports machining methods and technology
- Responds to technical queries
- Provides technical consultancy

### Training

- Programming / machine setup and operation
- Electrical and mechanical maintenance
- Applications engineering

Doosan Infracore Yantai Factory (DIY)

DIY Shanghai Office

Doosan Infracore Construction Equipment India Pvt. Ltd. (Machine Tool Div.) (DICEI)

Doosan International South East Asia Pte Ltd. (DISEA)

Doosan Infracore Seoul Office

Doosan Infracore Namsan Factory
Doosan Infracore Daewon Factory
Doosan Infracore Sungju Factory

## Domestic Service Support Network

| Integrated Support Centers | Sales Branch Offices | Post-Sales Service Centers | Designated Repair Service Centers |
|---|---|---|---|
| **2** | **7** | **6** | **31** |

**Major Specifications**

## PUMA GT series

| Description | Unit | PUMA GT2100 | PUMA GT2600 |
|---|---|---|---|
| Max. turning dia. | mm (inch) | 390 (15.4) | 460 (18.1) |
| Max. turning length | mm (inch) | 562 (22.1) | 658 (25.9) |
| Standard chuck size | inch | 8 | 10 |
| Bar working dia. | mm (inch) | 65 (2.6) | 81 (3.2) |
| Max. spindle speed | r/min | 4500 | 3500 |
| Max spindle power | kW (hp) | 18.5 (25) | 22 (30) |
| NC system | | DOOSAN-FANUC i | |

\* Standard machine specification

# Doosan Machine Tools

http://www.doosanmachinetools.com

## *Optimal Solutions for the Future*

\* For more details, please contact Doosan.
\* The specifications and information above-mentioned may be changed without prior notice.